

with end of car and passing through the inside face of knuckle when closed with coupler horn against the buffer block or back stop, and no other part of end of car or fixtures on same, above buffer block, other than exceptions herein noted, shall extend beyond the face of buffer block.

(2) Carriers are not required to make changes to secure additional end-ladder clearance on cars in service July 1, 1911, that have 10 or more inches end-ladder clearance, within 30 inches of side of car, until car is shopped for work amounting to practically rebuilding body of car, at which time they must be made to comply with the standards prescribed.

#### § 231.10 Caboose cars with platforms.

NOTE: a. The term "bottom of car" as used in § 231.10 is construed to mean "bottom of side-sill or sheathing over side-sill."

b. The term "corner of car" as used in § 231.10 is construed to mean the "line at inner edge of platform formed by the intersection of the side and end of car."

(a) *Hand brakes*—(1) *Number*. (i) Each caboose car shall be equipped with an efficient hand brake which shall operate in harmony with the power brake thereon.

(ii) The hand brake may be of any efficient design, but must provide the same degree of safety as the design shown on plate A.

(2) *Dimensions*. Same as specified for "Box and other house cars" (see § 231.1(a)(2)).

(3) *Location*. (i) Each hand brake shall be so located that it can be safely operated while car is in motion.

(ii) The brake shaft on caboose cars with platforms shall be located on platform to the left of center.

(iii) Carriers are not required to change the brakes from right to left side on steel or steel-underframe cars with platform end sills, in service July 1, 1911, except when such appliances are renewed, at which time they must be made to comply with the standards prescribed.

(4) *Manner of application*. Same as specified for "Box and other house cars" (see § 231.1(a)(4)).

(b) *Running boards*—(1) *Number*. One longitudinal running board.

(2) *Dimensions*. Same as specified for "Box and other house cars" (see § 231.1(c)(2)).

(3) *Location*. (i) Full length of car, center of roof. (On caboose cars with cupolas, longitudinal running boards shall extend from cupola to ends of roof.)

(ii) Outside - metal - roof - cars shall have latitudinal extensions leading to ladder locations.

(4) *Manner of application*. Same as specified for "Box and other house cars" (see § 231.1(c)(4)). See note below.

(c) *Ladders*—(1) *Number*. Two.

(2) *Dimensions*. None specified.

(3) *Location*. One on each end.

(4) *Manner of application*. Same as (see § 231.1(e)(4)). See note below.

(d) *Roof handholds*—(1) *Number*. One over each ladder. Where stiles of ladders extend 12 inches or more above roof, no other roof handholds are required.

(2) *Dimensions*. Same as specified for "Box and other house cars" (see § 231.1(g)(2)).

(3) *Location*. (i) On roof of caboose in line with and running parallel to treads of ladder, not less than 8 nor more than 15 inches from edge of roof.

(ii) Carriers are not required to change the location of handholds on cars in service July 1, 1911, except end handholds under end sills, where the appliances are within 3 inches of the required location, except that when cars undergo regular repairs they must then be made to comply with the standards prescribed.

(4) *Manner of application*. Same as specified for "Box and other house cars" (see § 231.1(g)(4)). See note below.

(e) *Cupola handholds*—(1) *Number*. One or more.

(2) *Dimensions*. Minimum diameter, five-eighths of an inch, wrought iron or steel. Minimum clearance, 2, preferably 2½ inches.

(3) *Location*. (i) One continuous handhold extending around top of cupola not more than 3 inches from edge of cupola roof.

(ii) Four right-angle handholds, one at each corner, not less than 16 inches in clear length from point of angle, may take the place of the one continuous handhold specified, if locations coincide.

## § 231.10

## 49 CFR Ch. II (10–1–02 Edition)

(iii) Carriers are not required to change the location of handholds on cars in service July 1, 1911, except end handholds under end sills, where the appliances are within 3 inches of the required location, except that when cars undergo regular repairs they must then be made to comply with the standards prescribed.

(4) *Manner of application.* Cupola handholds shall be securely fastened with not less than ½-inch bolts with nuts outside and riveted over or with not less than ½-inch rivets. See note below.

(f) *Side handholds*—(1) *Number.* Four.

(2) *Dimensions.* Minimum diameter, five-eighths of an inch, wrought iron or steel. Minimum clear length, 36 inches. Minimum clearance, 2, preferably 2½, inches.

(3) *Location.* (i) One near each end on each side of car, curving downward toward center of car from a point not less than 30 inches above platform to a point not more than 8 inches from bottom of car. Top end of handhold shall be not more than 8 inches from outside face of end sheathing.

(ii) Carriers are not required to change the location of handholds on cars in service July 1, 1911, except end handholds under end sills, where the appliances are within 3 inches of the required location, except that when cars undergo regular repairs they must then be made to comply with the standards prescribed.

(4) *Manner of application.* Same as specified for “Box and other house cars” (see § 231.1(h)(4)).

(g) *End handholds*—(1) *Number.* Four.

(2) *Dimensions.* Same as specified for “Box and other house cars” (see § 231.1(i)(2)).

(3) *Location.* (i) Horizontal, one near each side on each end of car on face of platform end sill. Clearance of outer end of handhold shall be not more than 16 inches from end of platform end sill.

(ii) Carriers are not required to change the location of handholds on cars in service July 1, 1911, except end handholds under end sills, where the appliances are within 3 inches of the required location, except that when cars undergo regular repairs they must then be made to comply with the standards prescribed.

(4) *Manner of application.* Same as specified for “Box and other house cars” (see § 231.1(i)(4)).

(h) *End-platform handholds*—(1) *Number.* Four.

(2) *Dimensions.* Minimum diameter, five-eighths of an inch, wrought iron or steel. Minimum clearance, 2, preferably 2½ inches.

(3) *Location.* (i) One right-angle handhold on each side of each end extending horizontally from door post to corner of car at approximate height of platform rail, then downward to within 12 inches of bottom of car.

(ii) Carriers are not required to change the location of handholds on cars in service July 1, 1911, except end handholds under end sills, where the appliances are within 3 inches of the required location, except that when cars undergo regular repairs they must then be made to comply with the standards prescribed.

(4) *Manner of application.* Handholds shall be securely fastened with bolts, screws, or rivets.

(i) *Caboose-platform steps.* Safe and suitable box steps leading to caboose platforms shall be provided at each corner of caboose. Lower tread of step shall be not more than 24 inches above top of rail.

(j) *Uncoupling levers.* Same as specified for “Box and other house cars” (see § 231.1(k)).

NOTE: Running boards may be omitted from Caboose Cars with platforms built after June 1, 1970, when each of the following conditions have been met:

(1) That ladders, roof handholds (including ladder extensions) and cupola handholds as specified in paragraphs (c), (d), and (e) of this § 231.10 are also omitted.

(2) That an appropriate notice be posted in protective manner or stenciled on interior of caboose stating “operating employees are prohibited under all conditions from occupying the roof of this caboose.”

(3) That a safe means must be provided to assure the safety of an operating employee when required to clean or maintain windows of a caboose without running boards.

(4) That the following additional safety appliances as specified be securely installed at the outer edge of each platform:

(a) Safety railing

(i) *Number:*

Horizontal—Four (4), two (2) upper and two (2) lower.

Vertical—Four (4).

(ii) *Dimensions:*

## Federal Railroad Administration, DOT

## § 231.11

Minimum diameter—One (1) inch wrought iron, steel, or other material of equivalent strength.

Minimum clearance—Four (4), preferably six (6) inches except at brace and fastening locations.

(iii) Location:

Vertical—One (1) at each corner of car extending from platform end sill to level of lower horizontal safety railing or to suitable bracket at roof.

Horizontal—Upper: Across each end of car near outer edge securely braced with vertical supports not less than 48 nor more than 54 inches above top of platform extending not less than full width of platform excluding hand brake stanchion area.

Horizontal—Lower: Across each end of car near outer edge securely braced with vertical supports not less than 36 nor more than 42 inches above top of platform excluding hand brake stanchion area. An opening may be provided near center. Such opening shall be provided with a secure safety chain(s) not less than ¼-inch diameter wrought iron, or steel, or other secure suitable closure.

(iv) Manner of application:

Safety railing shall be securely fastened with ½-inch bolts or rivets when possible and securely supported. A weld at connection of vertical and horizontal safety railing and vertical supports is permissible when those appliances are fabricated as a single unit.

(b) Kick plates

(i) Number: Four (4).

(ii) Dimensions:

Minimum thickness 10-gauge wrought iron, steel or other material of equivalent strength.

Width—Minimum 24 inches.

Height—Minimum 24 inches.

(iii) Location: One near each side on each end. Outer edge not more than 12 inches from adjacent vertical safety railing with bottom edge near top of platform. Hand brake stand may serve as part of kick plate.

(iv) Manner of application: Securely fastened by ½-inch bolts or rivets, or weld.

(v) Vertical hand rail supports spaced not more than eighteen (18) inches apart may be used in lieu of kick plates.

(5) That stove pipe shall be secured to prevent turning.

(6) That windows shall be laminated safety-type glass or equivalent.

*Existing caboose cars with platforms.* Running boards may be removed from Caboose Cars with Platforms built or under construction on or before June 1, 1970, when each of the following conditions have been met:

(1) That ladder treads above safety railing, roof handholds including ladder extensions, and cupola handholds specified in paragraphs (c), (d), and (e) of this § 231.10 are removed.

(2) That an appropriate notice be posted in protective manner or stenciled in interior of caboose stating “operating employees are prohibited under all conditions from occupying the roof of this caboose.”

(3) That a safe means must be provided to assure the safety of an operating employee when required to clean or maintain windows of a caboose without running boards.

(4) That end platform safety railing and handhold arrangement will be deemed to meet requirements except as to upper safety railing and kick plates, when those appliances are not provided. When vertical supports are not more than twenty-four (24) inches apart, such supports may be used in lieu of kick plates.

(5) That the following additional safety appliances (when not so provided) shall be securely installed at outer edge of each platform:

(a) Safety railing.

(i) Number:

Horizontal upper—Two (2).

(ii) Dimensions:

Minimum diameter—One (1) inch wrought iron, steel, or other material of equivalent strength.

Minimum clearance—Four (4), preferably six (6) inches except at brace and fastening locations.

(iii) Location:

Horizontal—Upper: Across each end of car near outer edge securely braced with vertical supports not less than 48 nor more than 54 inches above top of platform extending not less than full width of platform excluding hand brake stanchion area. Ladder tread not more than two (2) inches below level of upper safety railing may serve as a portion of said safety railing.

(b) Kick plates or vertical supports—Same as provided for caboose cars with platforms built after June 1, 1970, this note. See above.

(6) That stove pipe should be secured to prevent turning.

(7) Cupola or bay windows shall be laminated safety-type glass or equivalent and all other caboose windows shall be so provided on or before June 1, 1975.

[33 FR 19663, Dec. 25, 1968, as amended at 35 FR 10149, June 20, 1970]

### § 231.11 Caboose cars without platforms.

(a) *Hand brakes*—(1) *Number*. Same as specified for “Box and other house cars” (see § 231.1(a)(1)).

(2) *Dimensions*. Same as specified for “Box and other house cars” (see § 231.1(a)(2)).

(3) *Location*. (i) Each hand brake shall be so located that it can be safely operated while car is in motion.